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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/053,266      | 01/17/2002  | Ernst Heinz          | VOS-29              | 1286             |

1473 7590 12/28/2004  
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EXAMINER

HELMER, GEORGIA L

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,266

Applicant(s)

HEINZ ET AL.

Examiner

Georgia L. Helmer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

1. The Office acknowledges receipt of Applicants Response; dated 27 September 2004.
2. Applicant has cancelled claims 2, 3 and 24, and amended claims 5-9, 11, 13, 14, 16, 18, 19, 21 and 22. Claims 1, 4-23 and 25 are pending, and are examined in the instant action. The objection under 37 CFR 1.75(c) to claims 4-25 has been overcome.
- ~~3. This action is made FINAL.~~
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Priority***

6. Applicant has amended the specification to insert a cross-reference to other applications from which the instant application claims benefit. Also, certified copies of the priority document, EP99114074.0 has been provided to the Office.

### ***Drawings***

7. Applicant has provided substitute Figures 1 and 2 on 27 September 2004. Previous Figures 1 and 2 were not of sufficient quality to permit examination. The substitute Figures 1 and 2 are accepted.

### ***Claim Rejections - 35 USC § 112, second paragraph***

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Claims 1, 4-23 and 25 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is in part maintained for reasons of record, set forth in the Office Action mailed 26 May 2004, and in part due to Applicant's amendments to the claims.

Claim 1 has been amended to recite "wherein said first antibiotic and second antibiotic can be used for selecting a transformed plant cell..". It is not clear if Applicant intends a selection step or not. If so, the order of the selection step should be clear.

See (Response, p. 16), where Applicant discussed antibiotics which are "active in plants".

Claims 22 and 23 are rejected under 35 USC § 112-2 for the following reasons  
In claims 22 and 23, "at least one recombinant DNA" lacks antecedent basis.

***Claim Rejections - 35 USC § 112 Enablement***

8. Claims 1, 4-23 and 25 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for method of generating transgenic *Linum usitatissimum* (flax) plant cells comprising introducing *Agrobacterium tumefaciens* containing vector bearing a neomycin phosphotransferase gene which confers resistance to kanamycin and to G418 to hypocotyl segments, by coculturing for 4 days, transfer of cocultured material to medium containing a combination of NAA, benzylaminopurine, and kanamycin for 6 weeks, followed by transferring selected calli or shoot material to medium containing a second antibiotic, G418, and rooting selected calli or shoots to produce a whole plant, as described in the specification (pages 20,

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Example 2, through page 28), does not reasonably provide enablement for the broad scope of the claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Applicant's arguments filed 29 September 2004 have been fully considered, but are not deemed persuasive.

Applicant traverses saying primarily that the transformation for *Linum usitatissimum* was well known in the art, contrary to Examiner assertion (Response, p. 13) and cites the work of Bretagne-Sagnard et. al., discussed in the Office Action of 26 May 2004. Applicant's traversal is unpersuasive. See Office Action of 26 May 2004, p. 6. The rejection was deemed necessary due to the broad scope of the claims, including "all plants of the genus *Linum*", and all transformation methods. Furthermore, Applicant's statement that the transformation for *Linum usitatissimum* was well known in the art (see above) contradicts the specification, namely that transformation and regeneration techniques developed for most dicot and monocot plants have been unsuccessful for members of the family Linaceae, particularly *Linum usitatissimum* (specification, p. 3 lines 5-7).

Applicant traverses saying primarily they have claimed a method vastly superior to previously available methods (Response, p. 14). Applicant's traversal is unpersuasive because Applicant provides no showing of unexpected results, and the claims are not limited in scope to the teachings of unexpected result.

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9. Claims 1, 4-23 and 25 remain rejected under 35 U.S.C. 112, first paragraph, for reasons of record in the Office Action of 26 May 2004, because no single claim contains all essential elements of the invention. The essential elements include Agrobacterium transformation, use of selectable marker wherein the DNA confers resistance to a first and a second antibiotic, wherein the second antibiotic is different from the first antibiotic, wherein the antibiotics are selected from the group consisting of kanamycin, paromycin, neomycin, gentamycin, G-418, streptomycin, spectinomycin and imidazole.

Claims 22 and 23, drawn to a transgenic *Linum usitatissimum* cells, callus tissue or plant of claim 1, or a harvest part of said *Linum usitatissimum*, are rejected because the method of claim 1 are not enabled.

Claim 25, drawn to a method for the production of *Linum usitatissimum* plants which are male and /or female sterile, disease-resistant, having modified fiber composition or produce specific chemical or biological compounds comprising the method of claim 1, is rejected because no steps of the method are set forth.

Accordingly, the method of claim 25 is not enabled.

### ***Remarks***

10. No claims are allowed.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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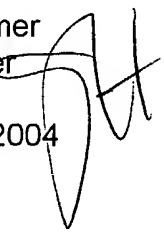
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 571-272-0976. The examiner can normally be reached on 8:30 -- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Georgia L. Helmer  
Patent Examiner  
Art Unit 1638  
December 27, 2004



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